



VIA Technologies, Inc.



VIA Cyrix® Processors

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VIA Technologies, Inc



About VIA

- ✍ **VIA's core logic market share is close to 50% ...and continuing to grow**
 - ✍ Market leader in DDR & PC133
 - ✍ Market leader in AMD Socket A platform
 - ✍ Nine of ten top global OEMs use VIA Apollo chipset platforms!
- ✍ **VIA provides the complete PC platform**
 - ✍ VIA Apollo & ProSavage™ chipsets
 - ✍ VIA Cyrix® processors
 - ✍ Communications & networking solutions
- ✍ **VIA is the fastest growing PC industry company**
 - ✍ Year 2000 revenues projected to reach US\$ 1 billion (+260%)
 - ✍ Year 2001 revenues set to grow by a further 50%







VIA Strengths



Technology Leadership

-  Fastest IC product design cycles in the industry
-  Leading-edge core logic, graphics, processor, communications, multimedia, and mixed signal capabilities

Flexible & Efficient Fabless Business Model

-  Access to state of the art process technology
-  Highly competitive cost structure

Close Industry Partnerships

-  Leading O/S, software, hardware, and memory vendors
-  Top tier PC OEMs and motherboard manufacturers

Greater China Manufacturing Engine

-  PC R&D & production base for the world

Timely Execution of Right Technology Initiatives





-  PC133 & DDR
-  Chipset Integration





Centaur Technology Inc.





Established in April '95 as subsidiary of IDT, Inc.

-  Glenn Henry's long-time dream  low-cost x86 processors
-  Start-to-ship first WinChip™ C6 processor in 2 ½ years
-  Also shipped WinChip™ 2 & WinChip™ 3 processors



Purchased by VIA technologies in August, 1999

-  Perfect fit with VIA  smooth integration (no losses)

Highly experienced, close-knit engineering team

-  Centaur President Glenn Henry (ex-IBM Fellow & Dell Sr. VP)
-  70 engineers located in Austin, Texas
-  Unique management style & culture  very productive

Unique processor design approach

-  Results  small size (low-cost), low power & fast design cycle

Our Mission: Develop all VIA processor solutions

-  Cyrix is now defunct as development group





Cyrix? Processor Milestones

August 1999

-  VIA purchases the Cyrix division from National Semiconductor


September 1999

-  VIA purchases Centaur Technology Inc. from IDT



June 2000

-  VIA launches VIA Cyrix? III processor at Computex Taipei 2000
-  AKA "Samuel" & "C5A" (developed by Centaur Technology)

September 2000

-  VIA Cyrix? III processor running at 600 MHz launched
-  Sampling of next generation processor (Samuel 2/C5B)

December 2000

-  VIA Cyrix? III processor running at 650/667 MHz launched
-  Next generation processor (Ezra/C5C) back in silicon (0.13?)

January 2001

-  VIA Cyrix? III processor running at 700 MHz launched





Our Processor Focus: The Value-Line

✍ **Cost-conscious customers & environments**

✍ **Internet applications**

- ✍ Web browsing
- ✍ E-mail
- ✍ Multimedia plugins

✍ **Mainstream business & personal appls**

- ✍ Word, Excel, PowerPoint, Desktop publishing
- ✍ MP3, DVD, digital pictures, multimedia games

✍ **Desktops & mobiles**

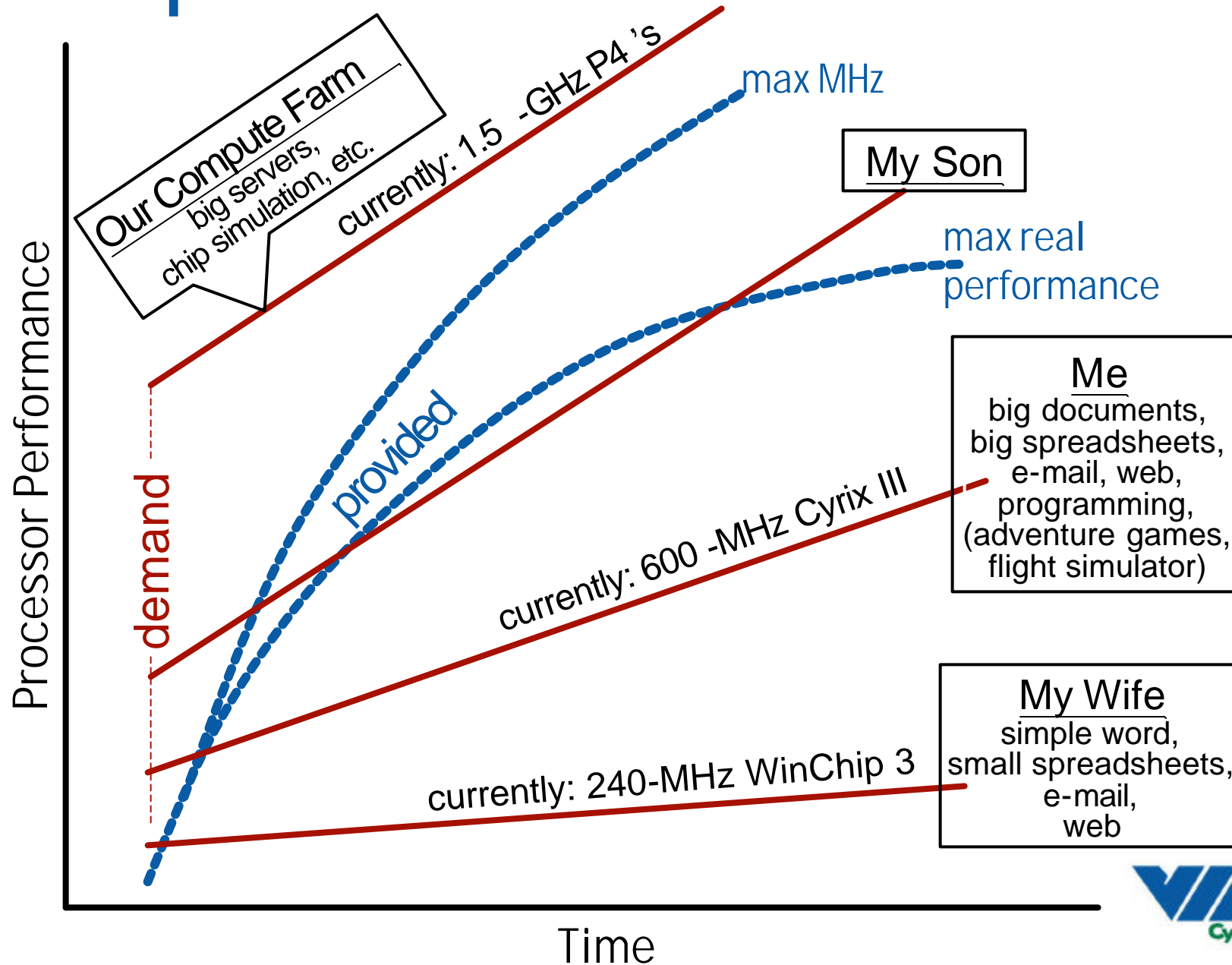
✍ **Not servers & workstations,**

✍ **Not extreme 3D, not digital video processing, etc.**

*90-95%
of the
potential
users
world-
wide*






Sample Performance Demand








Cyrix? Processor Strengths




Fastest Time to Market

-  World-class Centaur development team
-  Leading-edge manufacturing processes
-  Aggressive product roadmap



Cost Leadership

-  Smallest die size in the industry
-  Industry standard Socket 370 infrastructure
-  Flexible & efficient fabless model

Commitment to Needs of the Value Market

-  Plug-compatible
-  Best price/performance
-  Low real power dissipation

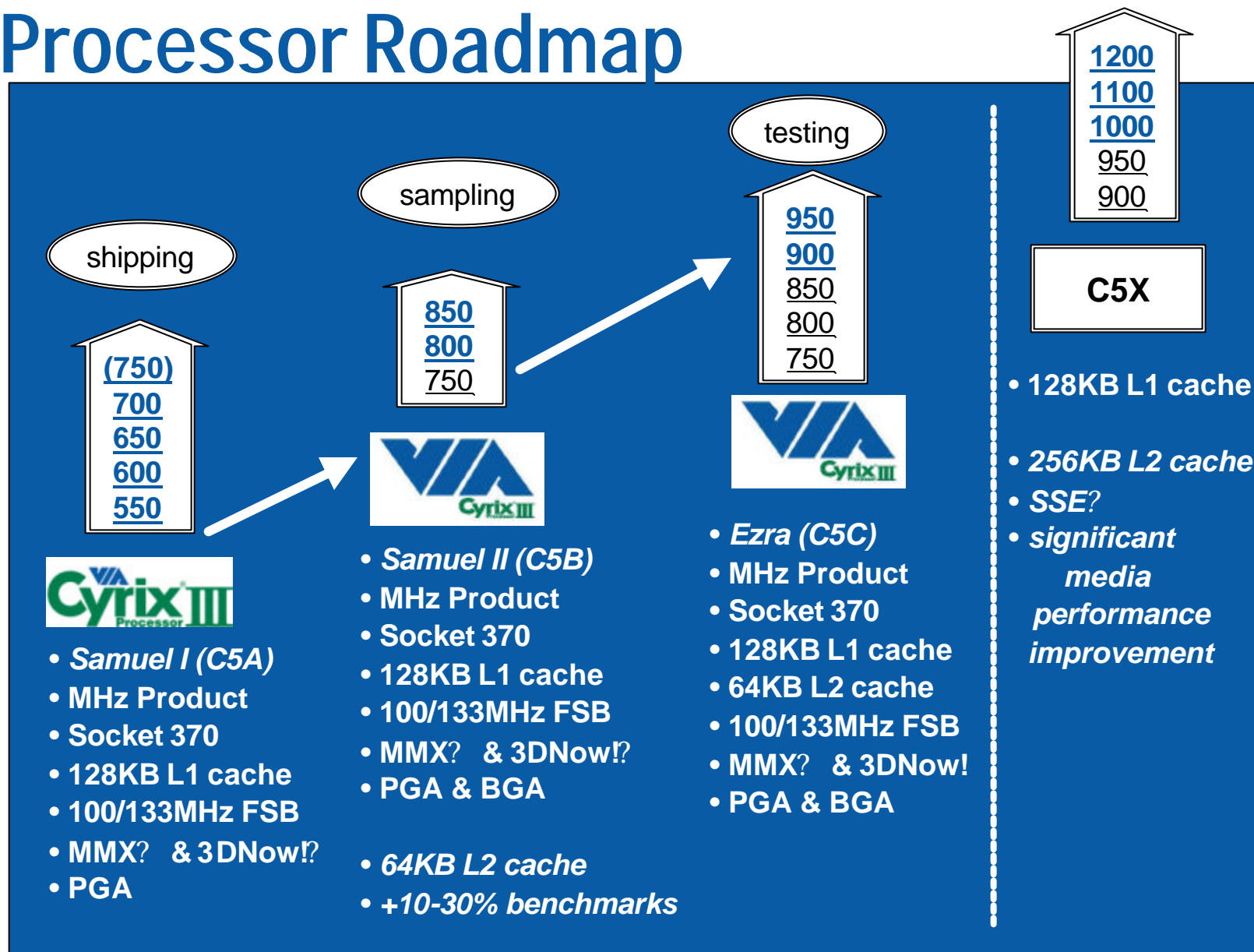
Leveraging VIA PC Platform Leadership

-  World's leading PC core logic supplier
-  Close customer, infrastructure, & channel relationships



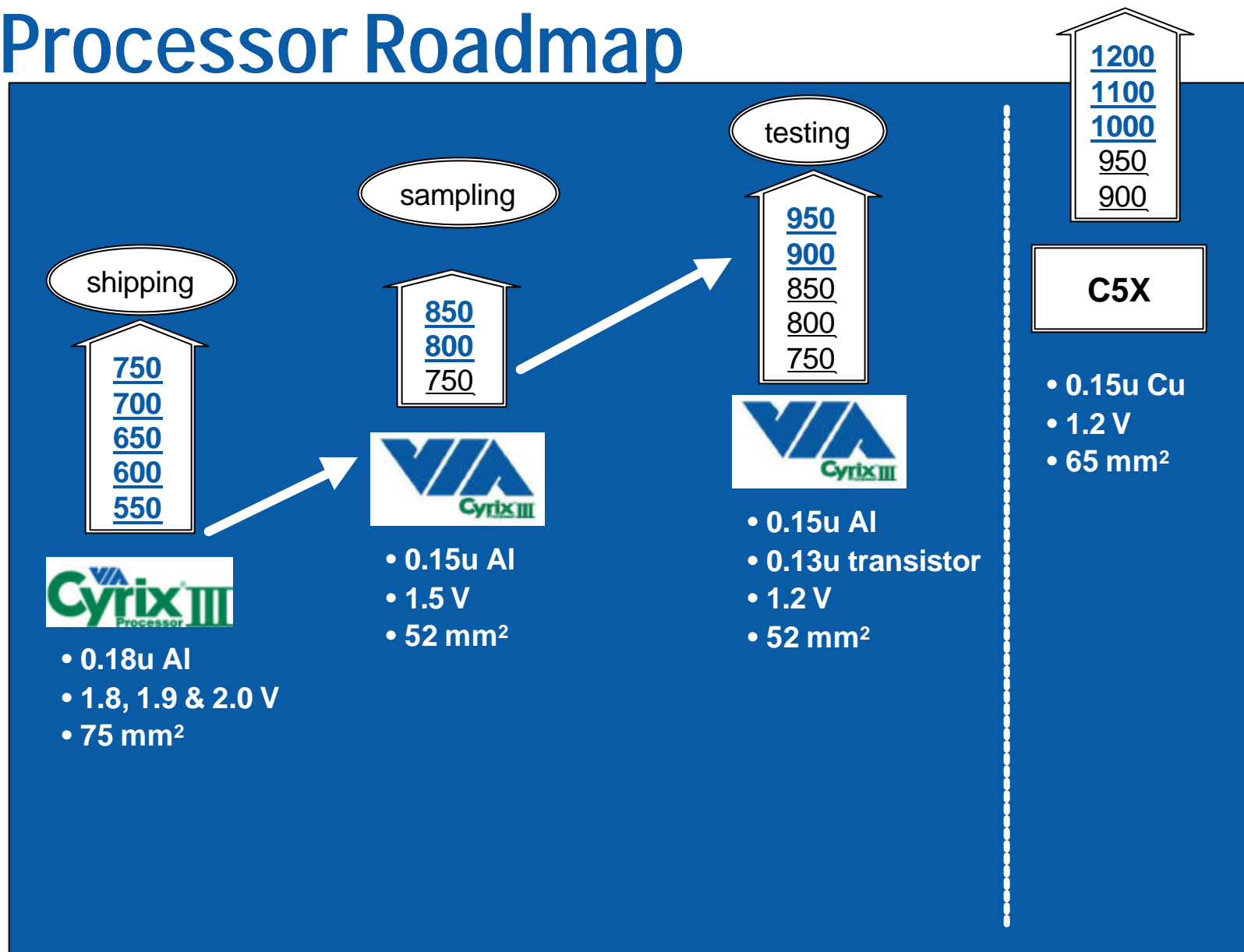


Processor Roadmap



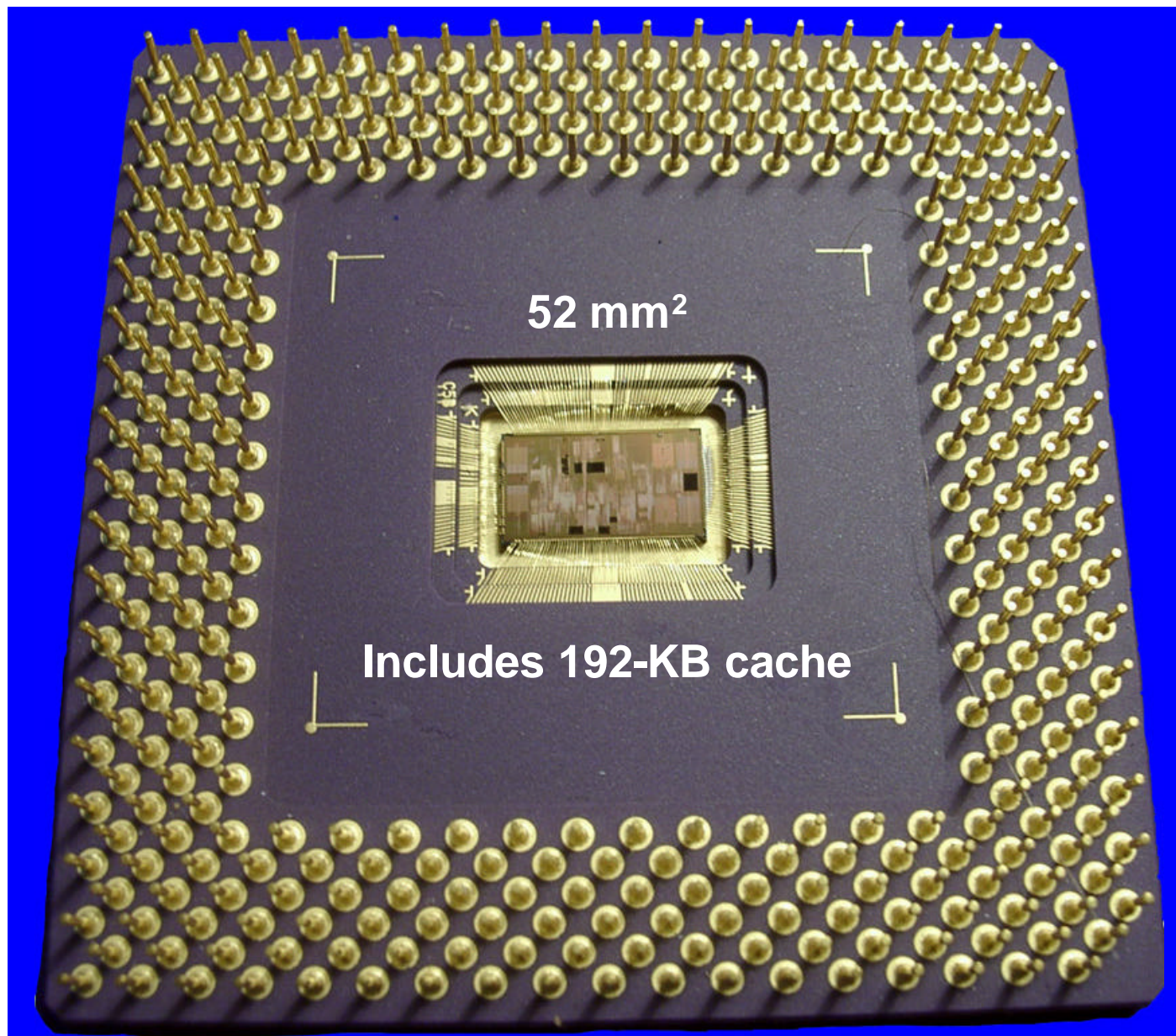


Processor Roadmap





World's Smallest x86 (Samuel II)









Performance Benchmarks

- ✍ **We believe in “real application” benchmarks**
 - ✍ Based on real application code
- ✍ **That do what our target customers do**
 - ✍ Word, Excel, web browsing, e-mail, DT publishing, MP3, etc.
- ✍ **That use representative “system” workloads**
 - ✍ Of what people really do & experience
- ✍ **That are developed by “independent” people**
 - ✍ To prevent bias toward a particular processor
- ✍ **That are publicly available**
 - ✍ So results can be validated
- ✍ **That use realistic systems**
 - ✍ What our target customers will use
- ✍ ***This is not what the industry is doing!***




Performance Benchmarks







Benchmarks We Believe In

-  Winstone 99  Office applications, realistic workloads
-  Office Bench  MS Office applications, realistic workloads

Benchmarks We Grudgingly Accept

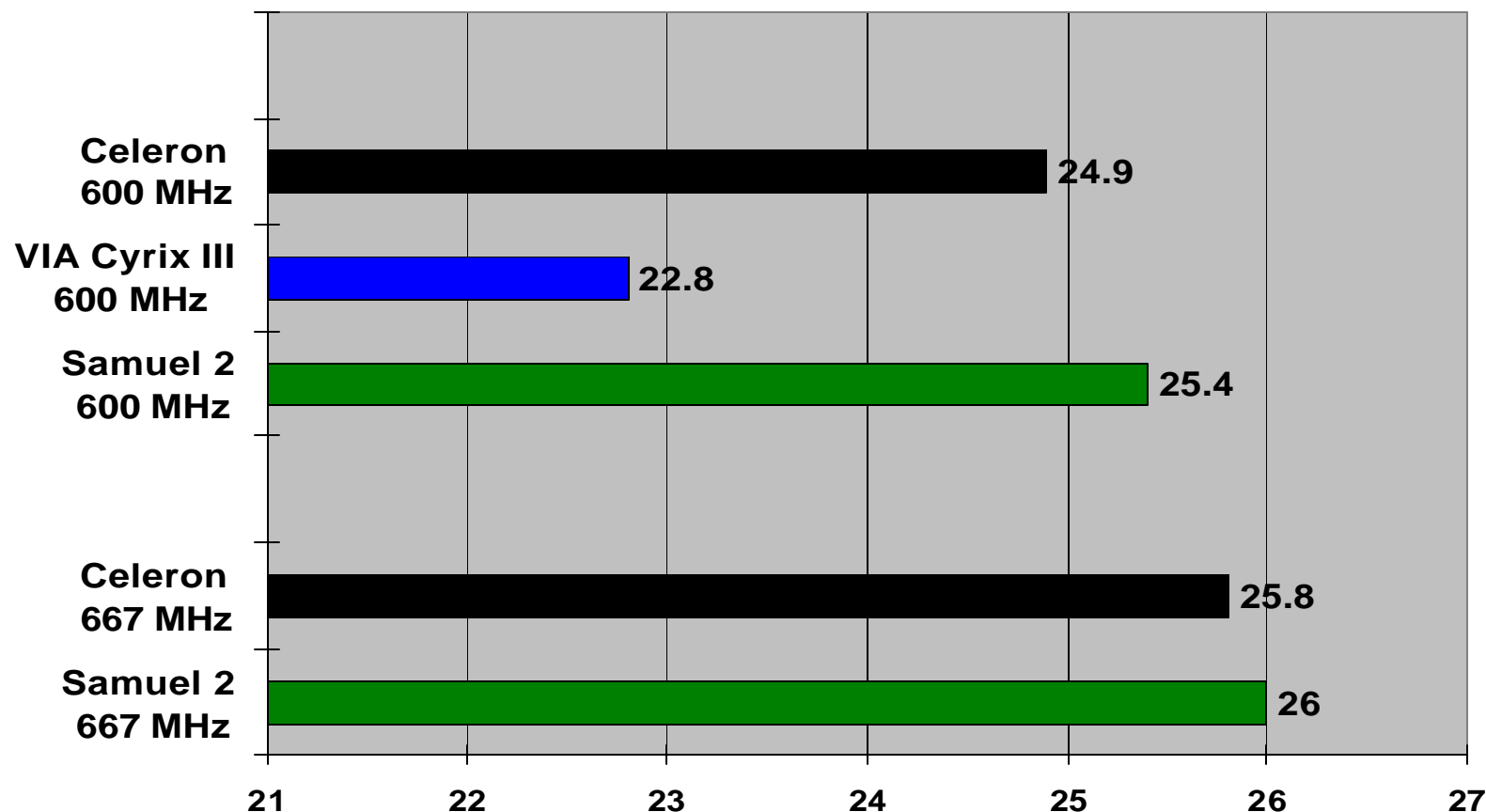
-  3DMark  not our target market, but at least it's real appls
-  Quake  not our target market, but at least it's real

“Bogus” Benchmarks

-  All the rest...
 -  *Unrealistic “hot spot” processor-only workloads*
 -  *Synthetic program (not real application)*
 -  *Developed by Intel*
 -  *Controlled by Intel*
 -  *Not our target market*



Winstone 99 Performance



Good Graphics System Configuration:

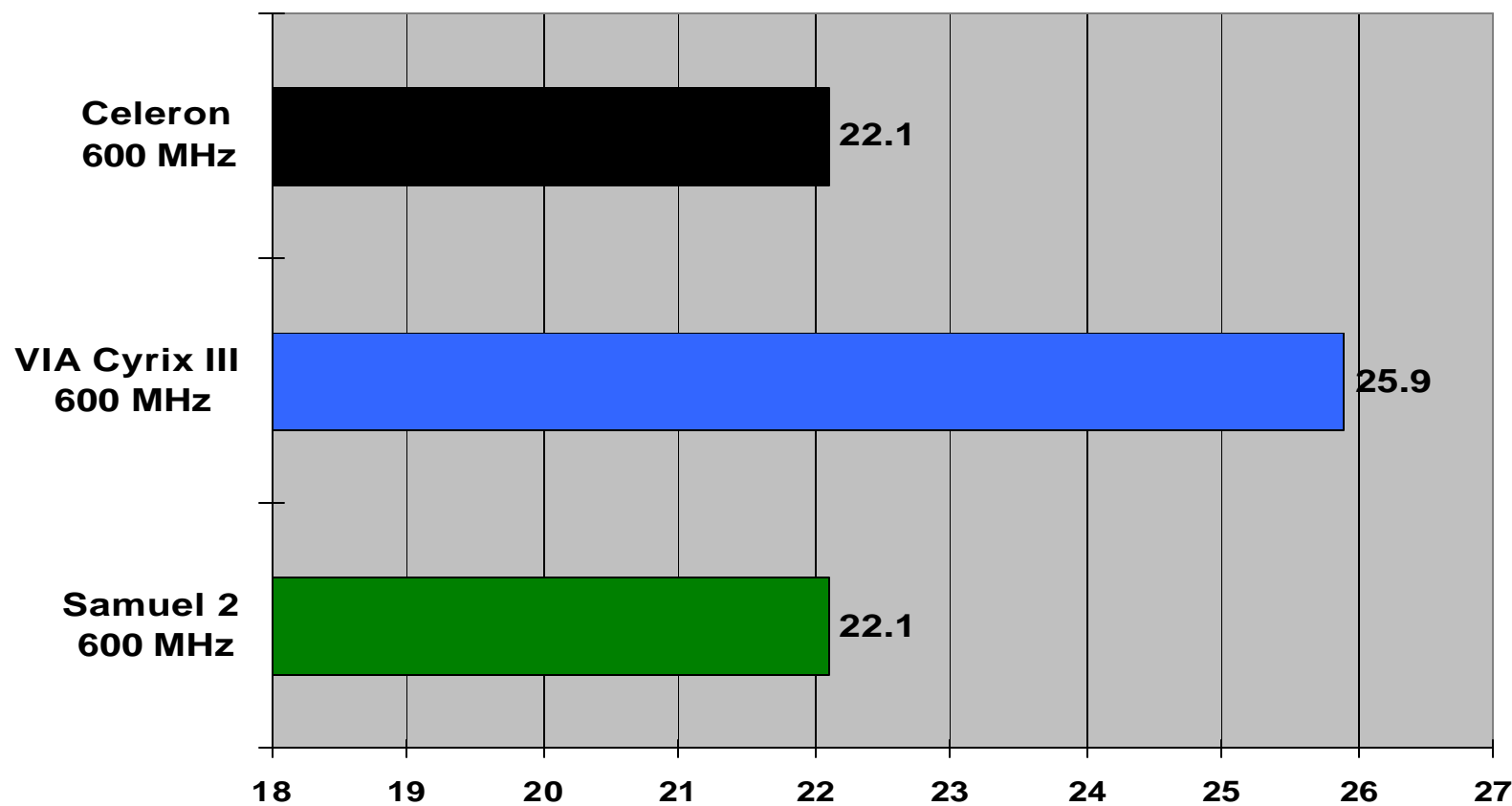
M/B : Gigabyte GA-6VX7-4X VIA 694X motherboard
VGA : GeForce2 GTS 64-MB DDR
DRAM : 128MB PC133
OS : Windows ME





OfficeBench Word 2000 Performance

Units of seconds: Lower score is better



Low-End System Configuration:

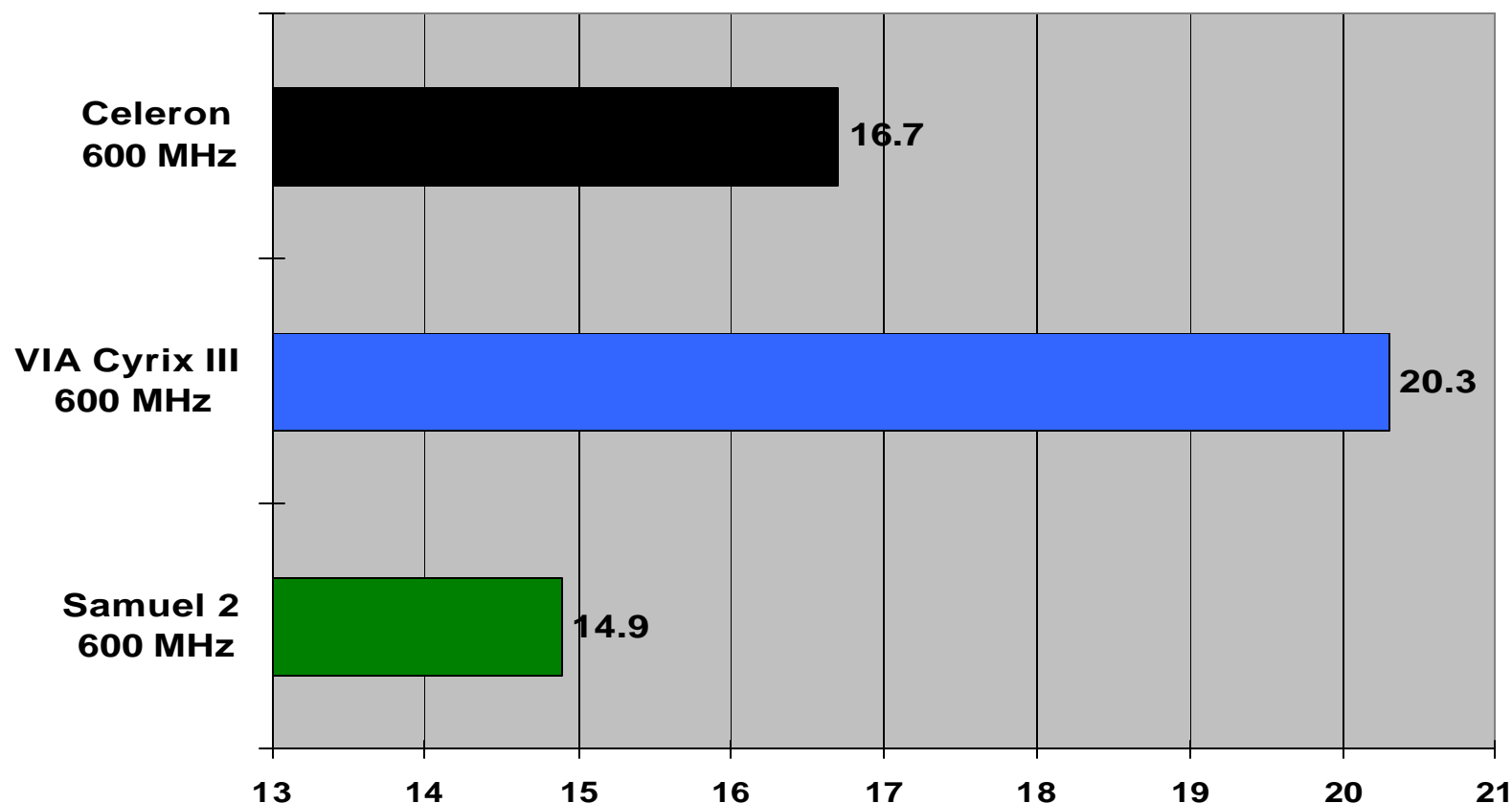
M/B : Gigabyte GA-6VX7-4X VIA 694X motherboard
VGA : Elsa Gladiac GTS 32 MB
DRAM : 128MB PC133
OS : Windows ME





OfficeBench Excel 2000 Performance

Units of seconds: Lower score is better



Low-End System Configuration:

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VGA : Elsa Gladiac GTS 32 MB
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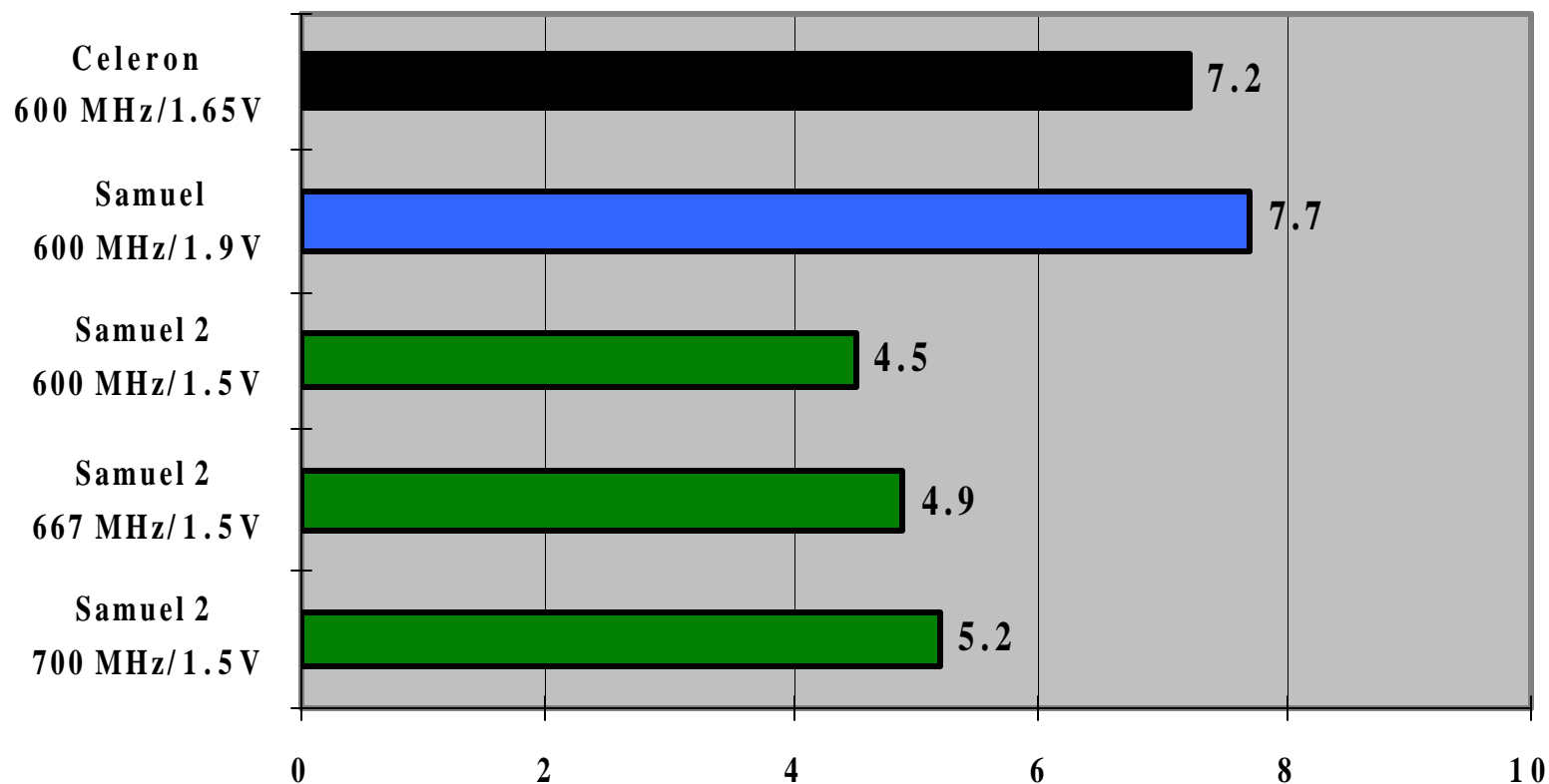
Power Dissipation

- ✍ **Our internal design is inherently low-power**
 - ✍ The same things that make it small make it low-power
- ✍ **We use advanced low-V technology**
 - ✍ Samuel II: 1.2-1.5V, Ezra: 1.0-1.2V
- ✍ **We do all the usual power management things**
 - ✍ Stop Grant, Sleep, Deep Sleep, Stop Clock, etc. modes
 - ✍ Internally, shutting down clocks, holding buses, etc.
- ✍ **Plus we have LongHaul™ technology**
 - ✍ Samuel I can change bus multiplier “on the fly”
 - ✍ Samuel II can change voltage “on the fly”
 - ✍ Software (BIOS) interface ✍ no hardware required!
 - ✍ Demo Windows popup available
 - ✍ Significant power savings



Power Dissipation

Average power consumed while running Winstone '99 on Windows 98SE



Value-line System Configuration:

M/B : VIA PLE133 motherboard
VGA : On Chip VGA, 8MB shared Memory, 1024x768x16bit
DRAM : KingMax 64MBx1 PC-133
HDD : IBM DJNA-371350 13.5GB UDMA66
O.S. : Windows 98 SE





Cyrix? III Processor Highlights

- ✍ **Full x86 & Internet Software Compatibility**
- ✍ **Plug-in Socket 370 Hardware Compatibility**
- ✍ **Performance for “Average” People,
Using Typical Applications & Workloads**
- ✍ **Low Power Consumption**
- ✍ **Compelling Value**
- ✍ **Rapid Product Introduction & Improvement**